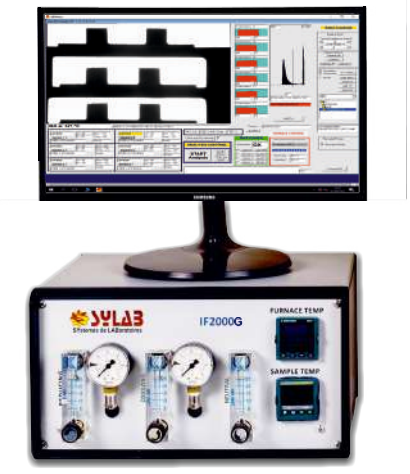
SYLAB
SYstemes de LABoratoires

IF2000G-HDC
IF2000G-HDBM
Ash Fusion Analyzer

Uses Latest Technology in the Service of Fusion Temperature Determinations

ASTM D 1857 ASTM E 953 AS 1038.15 ISO 540 CEN/TS 15370-1



Ash Fusion Analyzer


Biomass Ash


RDF Ash


Solid Bio Fuel Ash


Coke Ash


Coal Ash

ORBIT

25 YEARS OF EXCELLENCE

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Orbit Technologies Pvt. Ltd.

Orbit Technologies Pvt. Ltd., India is an ISO 9001 certified manufacturer of Thermogravimetric Analyzers, Carbon & Sulfur Analyzers, Ash Fusion Analyzers, Fast Pyrolysis Analyzers & Other Analytical Instruments.
Orbit's high performance analytical instruments are used for precise and reliable results.
Orbit Technologies has obtained the Technology and Business to Manufacture and Sell Carbon & Sulfur Analyzers, Ash Fusion Analyzers & Pyrolyzers from SYLAB S.a.r.l France.
Sylab S.a.r.l France, founded in 1989, is a manufacturer of Carbon & Sulfur Analyzers, Ash Fushion Analyzers, Pyrolyzers & other Analytical Instruments

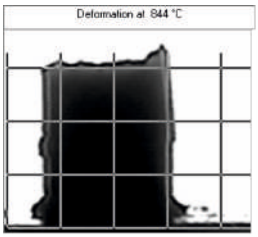
Ash Fusion Analyzer

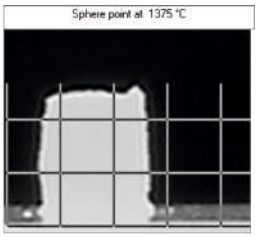
Uses Latest technology in the service of the fusion temperature determinations
IF2000G-HDC for Coal Ash and Coke Ash samples
IF2000G-HDBM for Biomass Ash, Refuse-Derived Fuel (RFD) Ash, and Solid mineral fuel Ash, solid bio fuel Ash

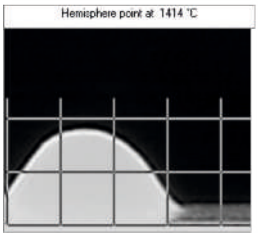
Orbit Ash Fusion Analyzer automatically determines four critical temperatures: Deformation Temperature, Softening Temperature, Hemispherical Temperature and Fluid Temperatures.

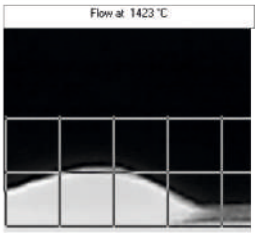
It is a Fully automatic instrument for determining the ash fusion points by means of image analysis. Orbit's Ash fusion Analyzer uses modern technology for monitoring, computing, storing results and curves obtained during the test. Up to 6 samples can be analysed in each batch.

- Precisely controlled high horizontal static temperature furnace
- Programmable furnace temperature ranges
- Maximum furnace temperature: IF2000G-HDC : 1600 deg C and IF2000G-HDBM : 1800 deg C
- Furnace is capable to work at both oxidizing and reducing atmospheres
- Programmable ramp rates from 1deg C to 12 deg C
- Temperature Resolution 1 deg C
- Specific temperature determination precision 20 deg C
- Accepts six samples either cylinder, pyramid or cone
- High Strength Four element heating furnace
- Work tube with integrated light for samples having low initial deformation temperatures
- Digital over temperature protection with high alarm relay









High Resolution Integrated camera

... to capture complete Ash Fusion temperatures

Ash Fusion Analyzer

- Integrated high resolution camera which is isolated from the high temperature area to improve camera life.
- Temperature is identified by quickly scrolling through the stored image
- Capable to record the complete analysis video and digital capture of the images.
- Adjustable grid scale for each test specimen
- Grid overlay feature for accurate comparison of sample height and width
- Accepts specimens having Cylinder, Pyramid and Cone shapes from 3mm x 3mm to 6mm x 6mm x 19mm dimensions.
- Direct specimen capturing without using mirrors for accurate and precise fusion temperature measurements.

Controller

Uses Latest technology in the service of the fusion temperature determinations

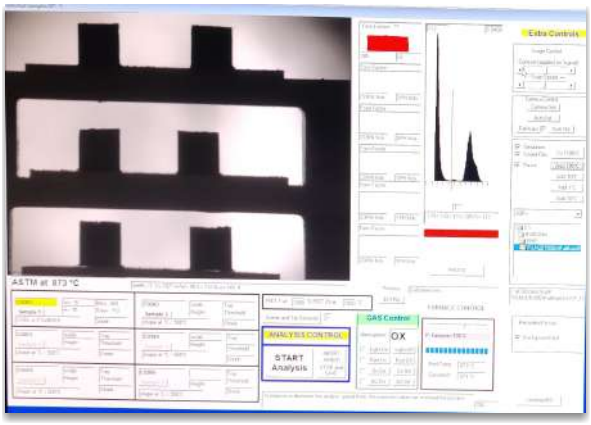
- All test results Comply with ASTM, CEN/TS, ISO and DIN test methods. Storage of individual sample pictures (1 deg C by 1 deg C).
- Inbuilt CO/CO2 and CO2/H2 gas mixtures (or) capable to accept pre mixed gases.
- Gases: CO/CO2 & CO2/H2 mixture ready to use, additional feature include CO, CO2, H2 separate entries, and mixture automatically made by the analyzer. Oxidizing atmospheres by inbuilt Air Pump (or) External Air Compressor.
- Automatic air flow cooling for the furnace + CO/CO2/H2/Air exhaust tube to the lab hood.
- Inbuilt flow meters for oxidising and reducing gas flow.

Ash Fusion Analyzer

Orbit AFT Software – where fusion tests meets innovation

- Orbit AFT software gives complete solutions for your Ash Fusion analysis.
- Easy to use windows based software.
- Can use samples from 3mm x 3mm to 6mm x 6mm x 19mm dimensions. Automatic sample shape identification.
- Continuous recording of sample images.
- Real time monitoring of the samples and test process.

- System is equipped with High resolution CCD camera. The whole test process will be monitored in real time. Option is available to replay the stored images for finding the sample characteristics against temperature raise.
- Test protocols, as per ISO, ASTM, CEN/TS, DIN, CEN/TR and BIS test methods are included, in addition to simulated analysis features using recorded picture of a previous analysis.
- Automatic identification settings are included in the setup, sample shape automatic recognition and computed points are automatically set according to the selected norms.



- Automatic and continuous high resolution image of four melting points of each sample at different temperature intervals is set by customer preference with the computer.
- The image capture rate can be programmable from 1 deg C per minute to 12 deg C per minute.
- Automatic multiple images are stored on a computer in sequence including date, time and batch identified and the temperature at the point of capture.

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Other analyzers from Orbit for Coal, Mineral and Material analysis:

CSBox Tube Analyzer

CSBox Tube Analyzer with High Temperature Resistance Tube Furnace for Carbon and Sulfur in Organic materials.

CSBox Tube CS Analyzer

- High efficiency horizontal furnace design
- System Complies with all national and international test standards for Carbon and Sulfur analysis
- Programmable furnace temperatures and programmable temperature ramp rates
- Unique user friendly design of Orbit, where furnace is isolated from the infrared analyzer to improve the life of the NDIR analyzer

CSBox HFA Analyzer

CSBox HFA Analyzer with High Frequency Induction Furnace for Carbon and Sulfur in Inorganic samples

- High frequency induction furnace ensures complete decomposition of the samples like Steel, Ores, Cast iron, Refractories & others.
- Unique user friendly design of Orbit, where furnace is isolated from the infrared analyzer to improve the life of the NDIR analyzer.
- Highly effective combustion for an extensive range of samples.
- Wider range of inorganic materials can be analysed.
- Optimised catalyst permits for precise carbon detection.

CSBox HFA Analyzer

CSBox DCS Analyzer

Reliable and precise Carbon and Sulfur measurements in both Organic and Inorganic samples

CSBox DCS Analyzer

- Unique combination of two different combustion techniques in one analyzer.
- Single analyzer is capable to operate with two furnaces one for Organic and the other for Inorganic samples.
- Due to the unique combination of two different combustion techniques in one Analyzer, the CSBox DCS Analyzer ensures reliable C/S measurement in both Organic and Inorganic sample materials.
- Typical sample materials for the CSBOX DCS analyzer are Steel, iron, cast iron, copper, ceramics, soil, fuel, oil, coal and coke.

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